CLAIMS

What is claimed is:

1. A composition comprising an amide related to
   a. a prostaglandin; and
   b. an amine selected from the group consisting of epinephrine, dopamine, diacetyl dopamine and serotonin.

2. The composition of claim 1 wherein the prostaglandin is a natural prostaglandin selected from the group consisting of prostaglandin E, prostaglandin E_2, prostaglandin F, prostaglandin $F_{2\alpha}$, and prostaglandin D_2, or is an analog thereof.

3. The composition of claim 1 wherein the prostaglandin is prostaglandin $F_{2\alpha}$ or an analog thereof.

4. The composition of claim 1 wherein the prostaglandin is prostaglandin E_2 or an analog thereof.

5. The composition of claim 1 wherein the prostaglandin comprises from 0 to 2 double covalent bonds connecting two carbon atoms.

6. The composition of claim 1 wherein the prostaglandin comprises two double covalent bonds connecting two carbon atoms.

7. The composition of claim 1 wherein the prostaglandin comprises from 1 to 3 heteroatoms, wherein said heteroatoms comprise S or O, said heteroatoms replacing carbon atoms which are present in prostaglandin E_2, prostaglandin F_2, or prostaglandin D_2.

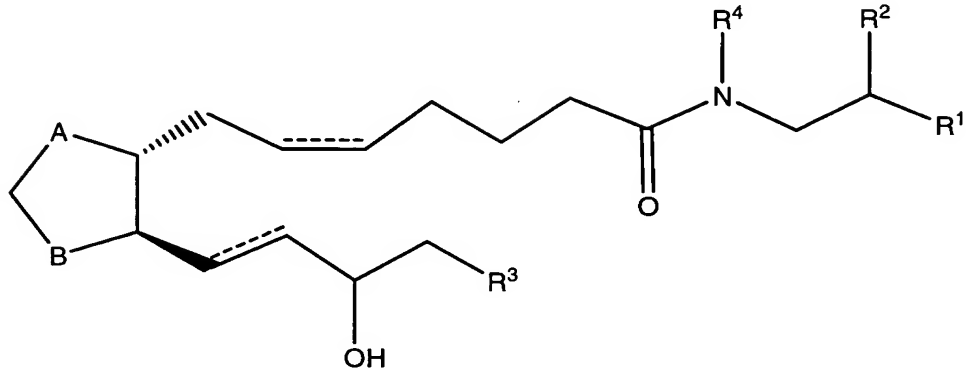
8. The composition of claim 1 wherein the prostaglandin comprises a moiety which replaces from 2 to 5 carbon atoms on the terminal end of a ω chain of a natural prostaglandin, said moiety comprising phenyl, naphthyl, benzothienyl, furanyl, or thienyl.

9. The composition of claim 1 wherein the prostaglandin is prostaglandin $F_{2\alpha}$ and the amine is dopamine.

10. The composition of claim 1 wherein the prostaglandin is prostaglandin $F_{2\alpha}$ and the amine is diacetyl dopamine.

11. The composition of claim 1 wherein the prostaglandin is prostaglandin $F_{2\alpha}$ and the amine is serotonin.

12. A compound comprising



or a salt, ester, or prodrug thereof,

wherein

said compound is not naturally occurring;

the hatched wedge indicates an α configuration and the solid wedge indicates a β configuration;

the dashed line indicates the presence or absence of a double bond;

A and B are both CHOH, or A is CHOH and B is C=O, or B is CHOH and A is C=O;

R^1 is phenyl, indolyl, or monohydroxy or dihydroxy derivatives of phenyl or indolyl;

R^2 is OH or H;

R^3 is *n*-butyl, *n*-pentyl, or *n*-hexyl; cyclohexyl, Ar, or W-Ar;

wherein Ar is phenyl, naphthyl, thienyl, furanyl, or benzothienyl, or a substituted derivative of phenyl, naphthyl, thienyl, furanyl, or benzothienyl, wherein from 1 to 3 hydrogen atoms are substituted with halogen, methyl, or trifluoromethyl; and

W is N, S, O, or CH_2; and

R^4 is hydrogen, methyl, ethyl, *iso*-propyl, or *n*-propyl.

13. The compound of claim 12 wherein R^3 is *n*-butyl, Ar, or W-Ar, wherein Ar is phenyl, naphthyl, or benzothienyl.

14. The compound of claim 12 wherein R^3 is *n*-butyl, Ar, or W-Ar, wherein Ar is phenyl.

15. The compound of claim 12 wherein R^3 is *n*-butyl or W-Ar, wherein W is O or CH_2, and Ar is phenyl.

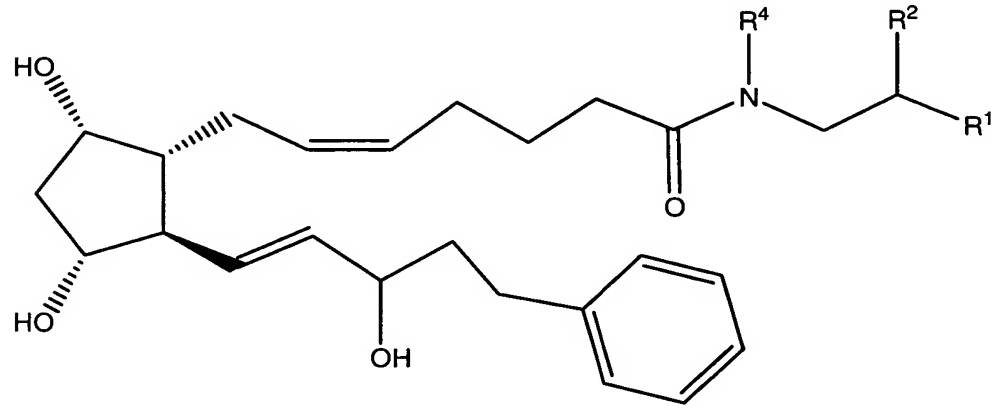
16. The compound of claim 12 wherein R^1 is 3,4-dihydroxyphenyl and R^2 is OH.

17. The compound of claim 12 wherein R^1 is 3,4-dihydroxyphenyl, R^2 is OH, and R^4 is methyl.

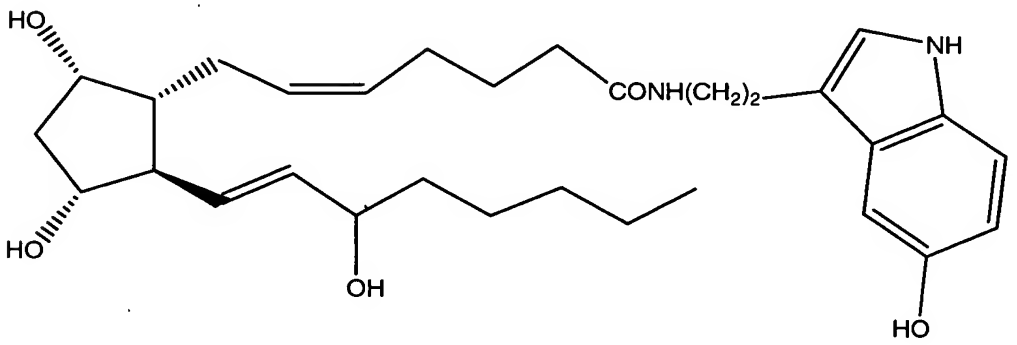
18. The compound of claim 12 wherein R^1 is 3,4-dihydroxyphenyl, R^2 is H, and R^4 is hydrogen.

19. The compound of claim 12 wherein R^1 is 5-hydroxyindolyl, R^2 is H, and R^4 is hydrogen.

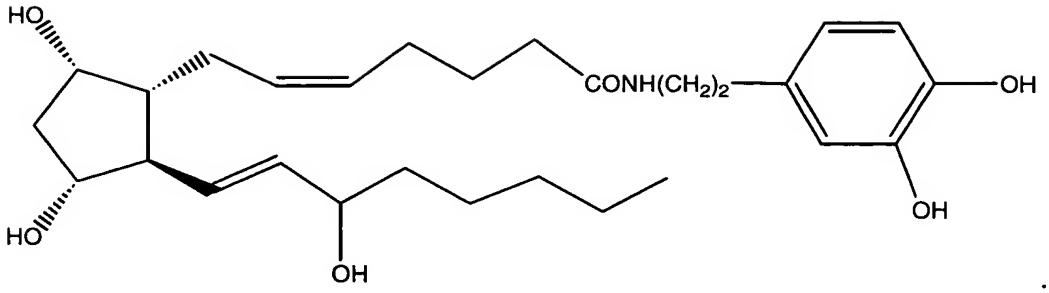
20. The compound of claim 12 comprising



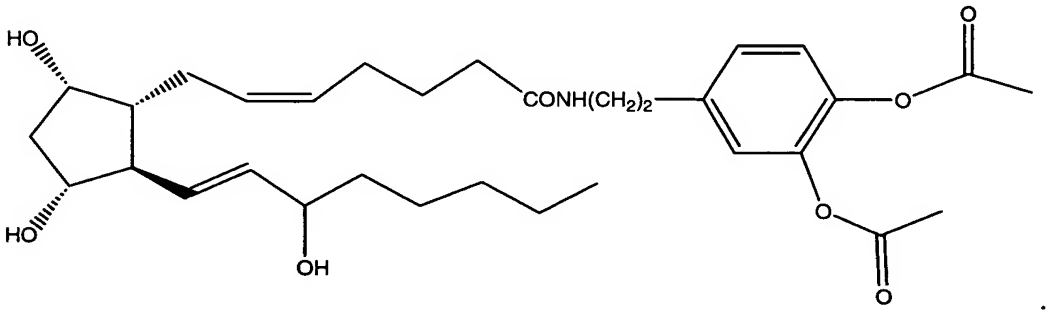
21. The compound of claim 12 comprising



22. The compound of claim 12 comprising



23. The compound of claim 12 comprising



24. An ophthalmic composition comprising a therapeutically active agent or a prodrug thereof,

said therapeutically active agent comprising an amide functional group, wherein

selective hydrolysis of said amide functional group of the therapeutically active agent produces:

a compound having agonist activity at a prostaglandin receptor and

a compound selected from the group consisting of serotonin and analogs thereof, dopamine and analogs thereof, and epinephrine and analogs thereof.

25. The composition of claim 24 wherein said prostaglandin receptor is selected from the group consisting of an FP receptor, an EP_1 receptor, an EP_2 receptor, an EP_4 receptor, a DP receptor, and combinations thereof.

26. The composition of claim 24 wherein said compound having agonist activity at a prostaglandin receptor is prostaglandin E, prostaglandin E_2, prostaglandin F, prostaglandin $F_{2\alpha}$, or prostaglandin D_2.

27. The composition of claim 24 wherein said compound having agonist activity at a prostaglandin receptor is prostaglandin $F_{2\alpha}$.

28. The composition of claim 24 wherein selective hydrolysis of said amide functional group produces epinephrine, dopamine, or serotonin.

29. The composition of claim 24 wherein the therapeutically active agent or said prodrug thereof is selected from the group consisting of (Z)-7-[(1R,2R,3R,5S)-3,5-Dihydroxy-2-((E)-(S)-3-hydroxy-oct-1-enyl)-cyclopentyl]-hept-5-enoic acid [2-(5-hydroxy-1*H*-indol-3-yl)-ethyl]-amide; Acetic acid 2-acetoxy-5-(2-{(Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-((E)-(S)-3-hydroxy-oct-1-enyl)-cyclopenyl]-hept-5-enoylamino}-ethyl)-phenyl ester; and (Z)-7-[(1R,2R,3R,5S)-3,5-Dihydroxy-2-((E)-(S)-3-hydroxy-oct-1-enyl)-cyclopentyl]-hept-5-enoic acid [2-(3,4-dihydroxy-phenyl)-ethyl]-amide.

30. A method of treating glaucoma comprising administering to a mammal suffering from glaucoma an effective amount of a therapeutically active agent or a pharmaceutically acceptable salt or a prodrug thereof,
said therapeutically active agent consisting of a prostaglandin and a 2-aryl-1-ethylamine coupled by an amide bond.

31. The method of claim 30 wherein the 2-aryl-1-ethylamine comprises from 1 to 3 hydroxy or acetyloxy moieties.

32. The method of claim 30 wherein said prostaglandin is an FP-related prostaglandin.

33. The method of claim 30 wherein said prostaglandin is an EP_2-related prostaglandin.

34. The method of claim 30 wherein said prostaglandin is an EP_4-related prostaglandin.

35. The method of claim 30 wherein said prostaglandin is a DP-related prostaglandin.

36. The method of claim 30 wherein said prostaglandin is prostaglandin prostaglandin $F_{2\alpha}$.

37. The method of claim 36 wherein said amine is epinephrine, dopamine, or serotonin.

38. The composition of claim 1 wherein the prostaglandin is prostaglandin $F_{2\alpha}$ and the amine is epinephrine.

39. The method of claim 30 wherein said prostaglandin is EP_1-related.